SUMMARY DATA FOR CASE 7D

This section contains the following economic data for case 7D:

- Capital Investment and Revenue Requirement Summary
- Total Plant Cost

CAPITAL INVESTMENT & REVENUE REQUIREMENT SUMMARY

TITLE/DEFINITION				
Case:	Ultra-Critical PC w/o CO_2			
Plant Size:	506.2 (MW,net)	HeatRate:	7,984	(Btu/kWh)
Primary/Secondary Fuel(type):	Illnois #6	Cost:	1.24	($/MMBtu)
Design/Construction:	4 (years)	BookLife:	20	(years)
TPC(Plant Cost) Year:	1999 (Dec.)	TPI Year:	2000	(Jan.)
Capacity Factor:	65 (%)	CO_2 Removed		(tons/year)

CAPITAL INVESTMENT		**$x1000**	**$/kW**
Process Capital & Facilities		484,200	956.5
Engineering(incl.C.M.,H.O.& Fee)		29,052	57.4
Process Contingency			
Project Contingency		74,653	147.5
TOTAL PLANT COST(TPC)		$587,904	1161.4
TOTAL CASH EXPENDED	$587,904		
AFDC	$47,696		
TOTAL PLANT INVESTMENT(TPI)		$635,600	1255.6
Royalty Allowance			
Preproduction Costs		16,531	32.7
Inventory Capital		5,869	11.6
Initial Catalyst & Chemicals(w/equip.)			
Land Cost		512	1.0
TOTAL CAPITAL REQUIREMENT(TCR)		$658,512	1300.9

OPERATING & MAINTENANCE COSTS (1999 Dollars)	**$x1000**	**$/kW-yr**
Operating Labor	4,815	9.5
Maintenance Labor	2,905	5.7
Maintenance Material	4,358	8.6
Administrative & Support Labor	1,930	3.8
TOTAL OPERATION & MAINTENANCE	$14,008	27.7
FIXED O & M	19.06	$/kW-yr
VARIABLE O & M	0.15	¢/kWh

CONSUMABLE OPERATING COSTS,less Fuel (1999 Dollars)	**$x1000**	**¢/kWh**
Water	525	0.02
Chemicals	6,391	0.22
Other Consumables	3,187	0.11
Waste Disposal	3,443	0.12
TOTAL CONSUMABLE OPERATING COSTS	$13,547	0.47
BY-PRODUCT CREDITS (1999 Dollars)		
FUEL COST (1999 Dollars)	$28,536	0.99

	Levelized (Over Book Life $)		
PRODUCTION COST SUMMARY	**$/ton CO_2**		**¢/kWh**
Fixed O & M		19.1/kW-yr	0.33
Variable O & M			0.15
Consumables			0.47
By-product Credit			
Fuel			0.99
TOTAL PRODUCTION COST			1.95
LEVELIZED CARRYING CHARGES(Capital)		179.5/kW-yr	3.15
LEVELIZED (Over Book Life) BUSBAR COST OF POWER			5.10

ESTIMATE BASIS/FINANCIAL CRITERIA for REVENUE REQUIREMENT CALCULATIONS

GENERAL DATA/CHARACTERISTICS

Case Title:	Ultra-Critical PC w/o CO_2	
Unit Size:/Plant Size:	506.2 MW,net	506.2 MWe
Location:	East-West Region	
Fuel: Primary/Secondary	Illinois #6	
Energy From Primary/Secondary Fuels	7,984 Btu/kWh	Btu/kWh
Levelized Capacity Factor / Preproduction(equivalent months):	65 %	1 months
Capital Cost Year Dollars (Reference Year Dollars):	1999 (December)	
Delivered Cost of Primary/Secondary Fuel	1.24 $/MBtu	$/MBtu
Design/Construction Period:	4 years	
Plant Startup Date (1st. Year Dollars):	2000 (January)	
Land Area/Unit Cost	320 acre	$1,600 /acre

FINANCIAL CRITERIA

Project Book Life:	20 years	
Book Salvage Value:	%	
Project Tax Life:	20 years	
Tax Depreciation Method:	Accel. based on ACRS Class	
Property Tax Rate:	1.0 % per year	
Insurance Tax Rate:	1.0 % per year	
Federal Income Tax Rate:	34.0 %	
State Income Tax Rate:	4.2 %	
Investment Tax Credit/% Eligible	%	%
Economic Basis:	Over Book Lif Constant Dollars	

Capital Structure	% of Total	Cost(%)
Common Equity	45	12.00
Preferred Stock	10	8.50
Debt	45	9.00
Weighted Cost of Capital:(after tax)		8.76 %

Escalation Rates	Over Book Life	1999 to 2000
General	% per year	% per year
Primary Fuel	% per year	% per year
Secondary Fuel	% per year	% per year

Client: EPRI/DOE VISION 21
Project: INNOVATIVE POWER CYCLES
Report Date: 28-Aug-2000
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TOTAL PLANT COST SUMMARY

Case: Ultra-Critical PC w/o CO_2
Plant Size: 506.2 MW,net
Estimate Type: Conceptual
Cost Base (Dec) 1999 ($x1000)

Acct No.	Item/Description	Equipment Cost	Material Cost	Labor Direct	Labor Indirect	Sales Tax	Bare Erected Cost $	Eng'g CM H.O.& Fee	Contingencies Process	Contingencies Project	TOTAL PLANT COST $	TOTAL PLANT COST $/kW
1	COAL & SORBENT HANDLING	7,512	2,270	5,997	420		**$16,199**	972		3,434	**$20,605**	41
2	COAL & SORBENT PREP & FEED	9,431		3,075	215		**$12,722**	763		2,697	**$16,182**	32
3	FEEDWATER & MISC. BOP SYSTEMS	17,789		8,474	593		**$26,856**	1,611		6,403	**$34,870**	69
4	PC BOILER & ACCESSORIES											
4.1	PC Boiler	85,158		34,213	2,395		**$121,766**	7,306		12,907	**$141,980**	280
4.2	Open											
4.3	Open											
4.4-4.9	Boiler BoP (w/FD & ID Fans)	3,411		1,177	82		**$4,670**	280		495	**$5,445**	11
	SUBTOTAL 4	*88,569*		*35,390*	*2,477*		***$126,436***	*7,586*		*13,402*	***$147,424***	*291*
5A	FLUE GAS CLEANUP	38,561		21,721	1,521		**$61,803**	3,708		6,551	**$72,062**	142
5B	CO_2 REMOVAL & COMPRESSION											
6	COMBUSTION TURBINE/ACCESSORIE											
6.1	Combustion Turbine Generator	N/A		N/A								
6.2-6.9	Combustion Turbine Accessories											
	SUBTOTAL 6											
7	HRSG, DUCTING & STACK											
7.1	Heat Recovery Steam Generator	N/A		N/A								
7.2-7.9	HRSG Accessories, Ductwork and Stack	10,535	943	8,989	629		**$21,096**	1,266		3,699	**$26,061**	51
	SUBTOTAL 7	*10,535*	*943*	*8,989*	*629*		***$21,096***	*1,266*		*3,699*	***$26,061***	*51*
8	STEAM TURBINE GENERATOR											
8.1	Steam TG & Accessories	57,584		9,938	696		**$68,217**	4,093		7,231	**$79,541**	157
8.2-8.9	Turbine Plant Auxiliaries and Steam Pipin	18,725	640	10,497	735		**$30,597**	1,836		5,820	**$38,253**	76
	SUBTOTAL 8	*76,309*	*640*	*20,435*	*1,430*		***$98,814***	*5,929*		*13,051*	***$117,794***	*233*
9	COOLING WATER SYSTEM	6,282	7,266	6,799	476		**$20,823**	1,249		4,268	**$26,341**	52
10	ASH/SPENT SORBENT HANDLING SYS	6,419	87	12,289	860		**$19,655**	1,179		3,159	**$23,993**	47
11	ACCESSORY ELECTRIC PLANT	10,303	3,213	10,642	745		**$24,902**	1,494		4,244	**$30,640**	61
12	INSTRUMENTATION & CONTROL	6,700		2,804	196		**$9,700**	582		1,301	**$11,584**	23
13	IMPROVEMENTS TO SITE	2,150	1,267	5,038	353		**$8,808**	529		2,801	**$12,138**	24
14	BUILDINGS & STRUCTURES		16,232	18,834	1,318		**$36,384**	2,183		9,642	**$48,209**	95
	TOTAL COST	**$280,561**	**$31,918**	**$160,487**	**$11,234**		**$484,200**	**$29,052**		**$74,653**	**$587,904**	**1161**